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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/084,342

02/28/2002

Jin-Gyo Seo

1293.1317

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7590

09/22/2004

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EXAMINER

LEUNG, QUYEN PHAN

ART UNIT

PAPER NUMBER

2828

DATE MAILED: 09/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/084,342

Applicant(s)

SEO, JIN-GYO

Examiner

Quyen P. Leung

Art Unit

2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 July 2004.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-47 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-47 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/2/2004.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Response to Amendment***

1. In response to applicant's amendment filed 7/1/2004, claims 1, 22, 30, 39, 41, 45 and 47 have been amended. Claims 1-47 are pending.

2. Applicant's arguments filed 7/1/2004 have been fully considered but they are not persuasive. Applicant made the following argument:

a. "Independent claim 40 of the present application recites, '... both said controller and said laser diode being formed in a single body.' Yamashita does not disclose or suggest having both the controller and the laser diode formed together in a single body. Instead, as previously discussed, Yamashita discloses having a controller and a laser diode formed onto a single base plate in order to improve the characteristics of a light transmission path, in particular, to provide for a compact and simple configuration. Thus, Yamashita's requirement that the controller and laser diode be formed on a single base plate necessarily indicates that the controller and the laser diode are not formed together in a single body. Therefore, for at least the reasons discussed above, independent claim 40 patentably distinguishes over the reference relied upon."

In response to "a" above, Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or

she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections. It is the examiner's position that Yamashita teaches a single body because if one were to physically handle the laser diode of Yamashita, the controller which is attached to it, would also be picked up. This would not be possible if they were not formed into a single body.

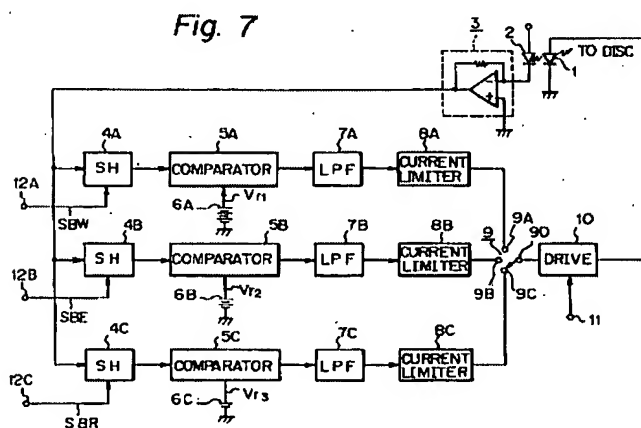
### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-38, 45-47 are rejected under 35 U.S.C. 102(b) as being anticipated by Kobayashi et al (4,796,250). Kobayashi et al discloses the claimed invention.



Namely, the power of the laser diode 1 is controlled to the optimum power in the reading mode on the basis of the detection output of the photo diode 2 in the area 1 in the servo area SA<sub>1</sub>. The power of the laser diode 1 is controlled to the optimum power in each of the writing and erasing modes on the basis of the detection output of the photo diode 2 in the servo area SA<sub>2</sub>. The detection output in the area 1 in the servo area SA<sub>1</sub> and the detection output in the servo area SA<sub>2</sub> are sampled and held in the sample and hold circuits 4A, 4B, and 4C a plurality of times. These detection outputs are sequentially compared with the target values by the comparators 5A, 5B, and 5C, thereby enabling an automatic power control to become stable. The optimum values in the writing, erasing, and reading modes are stored in the low pass filters 7A, 7B, and 7C, respectively.

Figure 7 shows the apparatus for controlling an output of a laser diode in an optical medium apparatus, comprising a sampling circuit (4A) sampling the output of the laser

Art Unit: 2828

diode (1) at a predetermined frequency according to a write pulse (see excerpt above) and generating a sampled signal; and an arithmetic unit (5A, 7A, 8A, 9, 10) receiving the sampled signal, generating a control power value applied to the laser diode (1) in response to the sampled signal and modifying the output of the laser diode in response to the control power value.

5. Claim 40 is rejected under 35 U.S.C. 102(b) as being anticipated by Yamashita et al (5,111,447). Yamashita discloses a laser diode (2) and a controller (6,7) receiving (via 6) and controlling (via 7) the output (via 12), the controller and the laser being included in one integrated circuit (see figure 2).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 39, 41-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al in view of Yamashita. Kobayashi has been discussed above, except for the controller and the laser diode being in one integrated circuit. As discussed above, Yamashita shows that it is known to integrate the controller and the laser diode into a single body. It would have been obvious to one of ordinary skill in the art to modify Kobayashi et al by employing a single body controller and laser diode, as taught by Yamashita, for the advantageous benefit of relative ease of handling.

***Conclusion***


8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quyen P. Leung whose telephone number is (571)272-1943. The examiner can normally be reached on 8-4:30, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Minsun Harvey can be reached on (571)272-1835. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Quyen P. Leung  
Primary Examiner  
Art Unit 2828

QPL